2005 Water Quality Report

The Town of Davie Utilities Department is committed to providing the highest quality drinking water to the residents of the Town of Davie. We are dedicated on a daily basis to making sure our residents drink aesthetically pleasing, safe water. This report provides a detailed description of the water quality for the Town of Davie Utilities Department during 2005. If you have any questions about this report concerning your water utility, please contact the Town of Davie Utilities Department at 954.327.3750.

Frequently Asked Questions About Your Water…

From where does my water come?

Your water source is water supply wells that draw from the Biscayne Aquifer, an underground geologic formation where water is stored. Water is pumped from the wells to two water treatment facilities in the Town of Davie: System III (South) Water Treatment Plant and System I (North) Water Treatment Plant. Both water treatment plants aerate, soften, filter, disinfect with chlorine and ammonia, and fluoridate water from the wells and feed treated water into a common water distribution system.

Does my drinking water meet Environmental Protection Agency (EPA) standards?

In 2005, we conducted over 2,000 tests for over 120 compounds that may be in the drinking water. In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain substances in water provided by public water systems. We are pleased to report that your drinking water meets all federal and state primary drinking water standards.

Why may contaminants be in drinking water?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive materials, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

(A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(B) Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

(C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

(D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

(E) Radioactive contaminants, which can be naturally occurring or can be the result of oil and gas production and mining activities.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1.800.426.4791.

Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (1.800.426.4791). The Food and Drug Administration (FDA) regulations establish limits from contaminants in bottled water, which must provide the same protection for public health.

How can I get involved?

We, at the Town of Davie, work around the clock to provide top-quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of the community, our way of life, and our children's future.

We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled Water Advisory Board meetings. They are held at the Town Hall on 6591 Orange Drive. Please visit our website for dates and times.

Water Quality Data Table

The Town of Davie Utilities Department routinely monitors for contaminants in your drinking water according to federal and state laws. The table below shows the results of our monitoring for the period of January 1 to December 31, 2005. We are proud that your drinking water meets or exceeds all federal and state requirements.

CONTAMINANT AND UNIT OF MEASURE	DATES OF SAMPLING (mo./yr)	MCL VIOLATION Y/N	HIGHEST MONTHLY PERCENTAGE[1]	MCLG	MCL	LIKELY SOURCE OF CONTAMINANT
Microbiological Contaminants						
Total Coliform Bacteria	01/05-12/05	N	0%	0	5%	Naturally present in the environment

CONTAMINANT AND UNIT OF MEASURE	DATES OF SAMPLING (mo./yr)	MCL/AL VIOLATION Y/N	LEVEL DETECTED[2]	RANGE[3]	MCLG	MCL	LIKELY SOURCE OF CONTAMINANT
Inorganic Contaminants							
Arsenic (ppb)	10/05	N	1.6	N/A	N/A	50	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	10/05	N	0.005	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Flouride (ppm)	10/05	N	0.810	N/A	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nickel (ppb)	10/05	N	0.290	N/A	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil.
Nitrate (as Nitrogen) (ppm)	10/05	N	0.033	N/A	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	10/05	N	33.0	N/A	N/A	160	Salt water intrusion, leaching from soil
Volatile Organic Contaminants							
Dichloromethane (ppb)	10/05	N	1.40	N/A	0	5	Discharge from pharmaceutical and chemical factories
Radiological Contaminant							
Alpha emitters (pCi/l)	10/05	N	0.900	N/A	0	15	Erosion of natural deposits
Radium 226 (pCi/L)	10/05	N	0.200	N/A	0	15	Erosion of natural deposits
Radium 228 (pCi/L)	10/05	N	0.800	N/A	0	15	Erosion of natural deposits
Group II Unregulated Contaminants							
Color (pcu)	10/05	N	10.0	N/A	N/A	15	Naturally occurring organics
TIHMs and Stage 1 Disinfectant/Disinfection By-Product (D/DBP) Parameters							
Total Chlorine (ppm)	1/05, 4/05, 7/05, 11/05	Y	6.2	0.46-6.2	4[4]	4[5]	Water additive used to control microbes
Haloacetic Acids (five) (HAA5) (ppb)	2/05, 4/05, 7/05, 11/05	N	34.5	14.2-58.9	N/A	60	By product of drinking water disinfection
TTHMs [Total trihalomethanes] (ppb)	1/05, 4/05, 7/05, 11/05	N	34.1	23.1-34.0	N/A	80/100	By product of drinking water disinfection

CONTAMINANT AND UNIT OF MEASURE	DATES OF SAMPLING (mo./yr)	MCL/AL VIOLATION Y/N	90TH PERCENTILE RESULT	NO. OF SAMPLING SITES EXCEEDING AL[6]	MCLG	AL	LIKELY SOURCE OF CONTAMINANT
Lead and Copper (Tap Water)							
Copper, tap water (ppm)	06/04	N	0.14	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead, tap water (ppb)	06/04	N	8.1	0	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits.

Notes:

1. Highest monthly percentage is the highest monthly percentage of positive samples for systems collecting at least 40 samples per month.
2. Level detected is maximum detected
3. Range is the range of levels detected, from the lowest to the highest level.
4. Maximum Residual Disinfectant Level Goal (MRDLG) = The level of a drinking water disinfectant below which there is no known or expected risk to health. MRLDGs to not reflect the benefits of use of disinfectants to control microbial contaminants.
5. Maximum Residual Disinfectant Level (MRDL) = The highest level of a disinfectant allowed in drinking water. There is a convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
6. None of the 30 lead and copper tap water samples exceeded EPA action levels. Sampling will be conducted again in 2007.

Key to Abbreviations and Definitions:

Action Level (AL) = The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.

Maximum Contaminant Level (MCL) = The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) = The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Picocuries per liter (pCi/L) = A measure of the radioactivity in water. A picocurie is 10 curies and is the quantity of radioactive material producing 2.22 nuclear transformations per minute.

Parts per million (ppm) = One part per million corresponds to one minute in 2 years or a single penny in $10,000.

Parts per billion (ppb) = One part per billion corresponds to one minute in 2,000 years or a single penny in $10,000,000.

TTHM = Total Trihalomethanes.

N/A = Not applicable.